

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 EX d IIB T4 Three-Phase		Product code : 12314405
Frame	: 315S/M	Locked rotor time	: 48s (cold) 27s (hot)	
Output	: 110 kW	Temperature rise	: 80 K	
Poles	: 4	Duty cycle	: S1	
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C	
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.	
Rated current	: 202/116 A	Protection degree	: IP55	
L. R. Amperes	: 1434/826 A	Cooling method	: IC411 - TEFC	
LRC	: 7.1	Mounting	: B3T	
No load current	: 54.0/31.1 A	Rotation <sup>1</sup>	: Both (CW and CCW)	
Rated speed	: 1480 rpm	Noise level <sup>2</sup>	: 77.0 dB(A)	
Slip	: 1.33 %	Starting method	: Direct On Line	
Rated torque	: 72.4 kgfm	Approx. weight <sup>3</sup>	: 1027 kg	
Locked rotor torque	: 210 %			
Breakdown torque	: 240 %			
Insulation class	: F			
Service factor	: 1.00			
Moment of inertia (J)	: 2.71 kgm <sup>2</sup>			
Design	: N			
Output	50%	75%	100%	Foundation loads
Efficiency (%)	92.0	93.3	94.0	Max. traction : 813 kgf
Power Factor	0.80	0.86	0.88	Max. compression : 1840 kgf
		<u>Drive end</u>	<u>Non drive end</u>	
Bearing type	:	6319 C3	6316 C3	
Sealing	:	Taconite Labyrinth	Taconite Labyrinth	
Lubrication interval	:	9029 h	10421 h	
Lubricant amount	:	45 g	34 g	
Lubricant type	:	Mobil Polyrex EM		
Notes				
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.				
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.				
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Customer : \_\_\_\_\_

### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	150 °C

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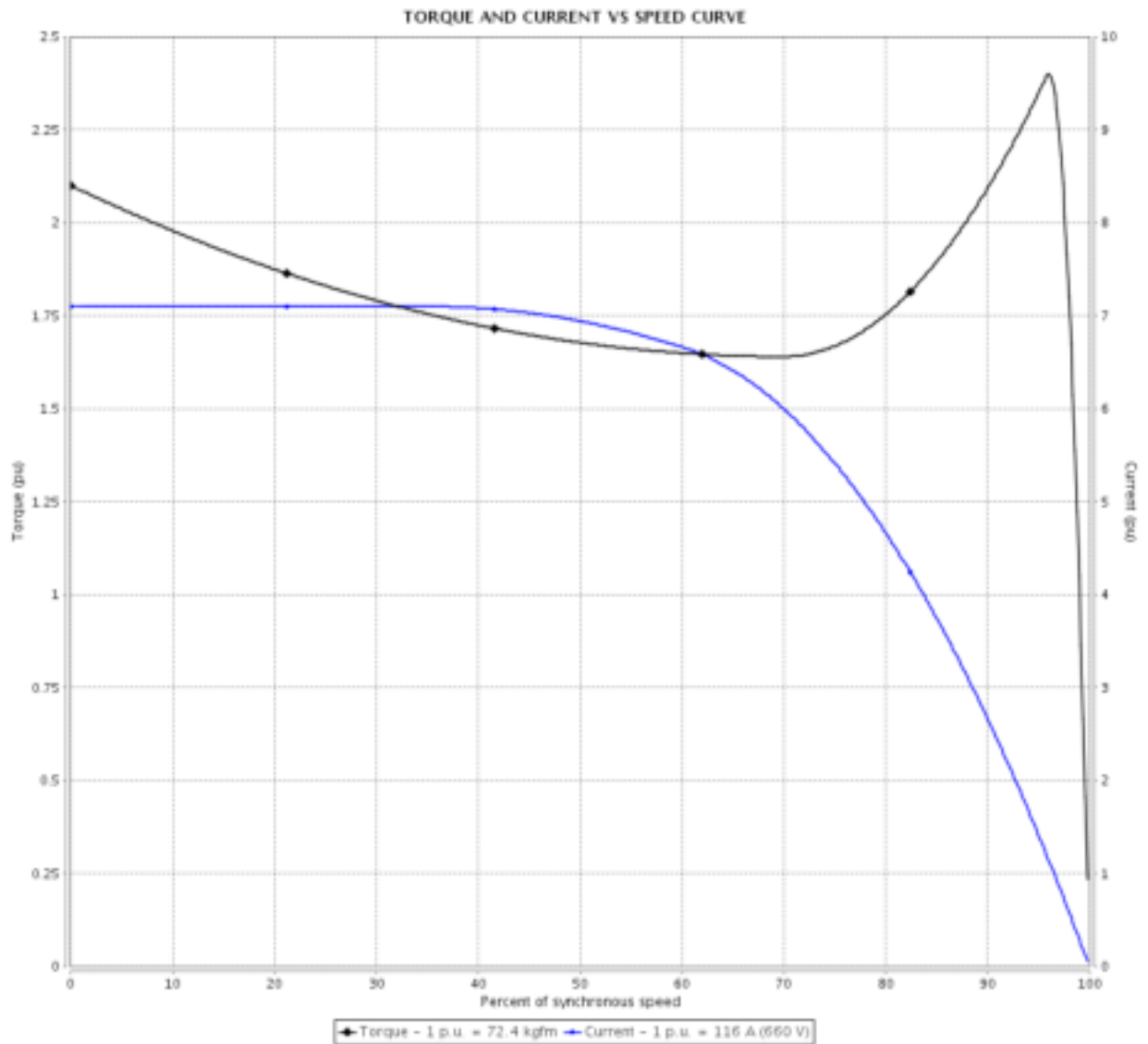
# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 PUMP/FILTER Three-Phase Product code : 12314405



Performance : 380/660 V 50 Hz 4P

Rated current	: 202/116 A	Moment of inertia (J)	: 2.71 kgm <sup>2</sup>
LRC	: 7.1	Duty cycle	: S1
Rated torque	: 72.4 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: N

Locked rotor time : 48s (cold) 27s (hot)

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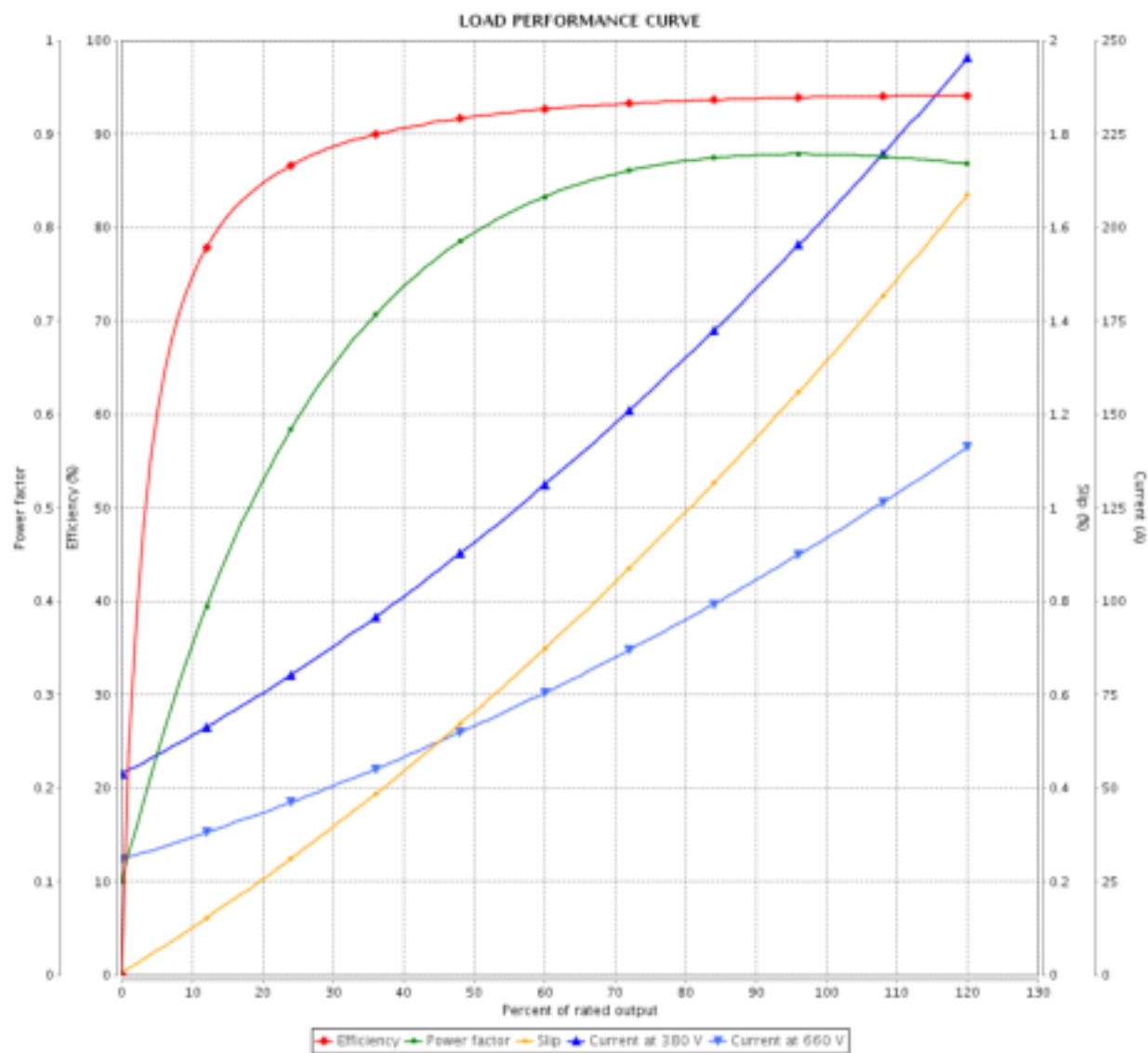
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 PUMP/FILTER Three-Phase Product code : 12314405



Performance : 380/660 V 50 Hz 4P

Rated current : 202/116 A  
LRC : 7.1  
Rated torque : 72.4 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 240 %  
Rated speed : 1480 rpm

Moment of inertia (J) : 2.71 kgm<sup>2</sup>  
Duty cycle : S1  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : N

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